CLAIMS

What is claimed is:

1. A conformable, multi-phasic implant that is not readily flowable for the repair and regeneration of tissue, said implant comprising a tissue conductive matrix wherein at least a first phase of said matrix comprises a non-soluble fibrous material and at least a second phase comprises a flowable biocompatible polymer.

2. The implant of claim 1, wherein the second phase is initially dry and said dry second phase becomes flowable following hydration.

3. The implant of claim 1, wherein the second phase is soluble collagen paste or gel.

4. The implant of claim 1, wherein the second phase degrades faster than the first phase.

5. The implant of claim 4, wherein the second phase acts as a delayed porosifying agent.

6. The implant of claim 1, wherein the first phase comprises biocompatible polymer fibers.

7. The implant of claim 6, wherein the biocompatible polymer fibers are collagen fibers.

8. The implant of claim 1, wherein the non-soluble fibrous material comprises natural collagen.

9. The implant of claim 1, wherein the first phase supports non-soluble granules or chips.

10. The implant of claim 9, wherein the granules or chips are in the form of spheres.

11. The implant of claim 10, wherein the granules or chips are in the form of micro spheres.

12. The implant of claim 9, wherein the granules or chips are composed of ceramic

13. The implant of claim 12, wherein the ceramic is a tricalcium phosphate

14. The implant of claim 13, wherein the tricalcium phosphate is porous.

15. The implant of claim 9, wherein the granules or chips comprise bone.

16. The implant of claim 15, wherein the bone has been demineralized.

17. The implant of claim 1, wherein the matrix further comprises a biologically active or pharmaceutical agent.

18. The implant of claim 17, wherein the agent is added to the implant at, or immediately prior to placement of said implant into said tissue

19. The implant of claim 18, wherein the agent is selected from one or more of the groups of biologically active agents, pharmaceuticals, or active ingredients.

20. The implant of claim 19, wherein the biologically active agent comprises cells.

21. The implant of claim 20 wherein the cells are in blood or bone marrow.

22. The implant of claim 9, wherein the granules or chips improves the mechanical, biological or resorption characteristics of said implant.

23. The implant of claim 22, wherein the concentration of chips or granules is between 10 percent and 90 percent of the construct by weight.

24. The implant of claim 22, wherein the concentration of chips or granules is between 70 percent and 90 percent of the construct by weight.

25. The implant of claim 22, wherein the concentration of chips or granules is between 75 percent and 85 percent of the construct by weight.

26. The implant of claim 1, wherein the ratio of the second phase to the first phase is in the range of about 1:20 to 10:1.

27. In combination with the implant of claim 1, a syringe, wherein the conformable, multi-phasic implant is arranged to be stored and delivered with said syringe.

28. In combination with the implant of claim 1, a syringe-like cylindrical housing, wherein the conformable, multi-phasic implant is arranged to be stored and delivered with said syringe-like cylindrical housing.

29. The implant of claim 28, wherein the cross-sectional configuration of the cylindrical housing permits sliding passage through the channel of a laparoscopic cannula or incision

30. A conformable, multi-phasic implant that is not readily flowable for the repair and regeneration of tissue, said implant comprised of components that resorb in stages wherein:

    a. At least a first component is a non-soluble collagen fiber; and

    b. At least a second components is a flowable soluble collagen gel;

    wherein the flowable collagen gel holds the collagen fibers together, providing a level of structural integrity to the implant.

31. The implant of claim 30, wherein the implant initially comprises non-soluble collagen which is in the form of a depot surrounded by lyophilized soluble collagen prior to implantation, wherein the lyophilized soluble collagen collapses into said flowable gel upon hydration.

32. The implant of claim 31, wherein said hydration occurs following implantation.

33. The implant of claim 31, wherein said hydration occurs prior to implantation.

34. A conformable, multi-phasic implant that is not readily flowable for the repair and regeneration of tissue, said implant comprised of components that resorbs in stages wherein:

a. At least a first component is a non-soluble ceramic granule;
b. At least a second component is a non-soluble collagen fiber: and
c. At least a third component is a non-porous collagen gel;

wherein the non-porous collagen gel holds the granules and fibers together, providing a level of structural integrity to the implant.